

REMARKS

Reconsideration of this application, as presently amended, is respectfully requested. Claims 1-11 are pending in the present application. Claims 1-11 stand rejected.

Claims 5 and 9-11 were indicated to be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. §112, second paragraph, set forth in the Office Action and to include all of the limitations of the base claim and any intervening claims.

Summary of Telephonic Interview

Applicants would like to thank the Examiner, Mr. Jose V. Chen, for the courtesies extended to applicants' representative during the telephonic interview conducted on April 15, 2010. During the course of the telephonic interview, the rejections under §112, second paragraph, and under §103 were discussed.

Regarding the §112, second paragraph, rejection of dependent claims 5 and 9-11, no agreement was reached during the interview. However, as will be discussed in more detail below, in an effort to expedite prosecution, claims 5 and 9-11 have been amended to attempt to obviate the §112(2) rejection.

Regarding the §103 rejection, during the interview, the Examiner appeared to agree that there are differences between the cited prior art and the claimed invention, as applicants' arguments distinguishing the claimed invention over the cited prior art were not rebutted.

However, during the course of the interview, the Examiner raised a new issue regarding the clarity of certain language in claim 1. More specifically, the Examiner asserted that the

language found in lines 6-8 of claim 1 related to the manner in which the guide blocks are assembled to or joined to the rail is unclear. The Examiner requested that this language be clarified. In response to the Examiner's request to clarify the claim language, claim 1 has been amended to clarify the language defining the connection between the rail, the rotary table, and the guide blocks. Specifically, claim 1 has been amended to recite "wherein a top surface of said rail opposite to the portion of said rail fitted into the U-shaped cross-sectional opening and an underside of said rotary table are joined together".

Additional matters that were discussed during the interview that are relevant to the specific rejections will be noted in the discussion of the specific rejections below.

Claim Rejection - 35 U.S.C. §112, second paragraph

Claims 5 and 9-11 were rejected under 35 U.S.C. §112, second paragraph, for alleged indefiniteness. The basic rationale for the §112(2) rejection is that the "The limitations in the claims present *a catalog of structures with no clear interconnection of the structures and definition as to how such structures function or perform.*" See Office Action, page 2, lines 13-15.

Initially, as noted above, claims 5 and 9-11 have been amended to attempt to obviate the §112(2) rejection by clarifying the relationship between structures and how such structures function or perform. Support for the proposed amendment to claims 5 and 9-11 is provided, e.g., on page 9, lines 20-24; and page 11, lines 8-15.

However, applicants respectfully request that the following discussion be considered because it is significant relative to how the claimed structures are “interconnected” and the definiteness of the claim language with respect to the “interconnections” between structures.

More specifically, during the course of the interview, Applicants representative emphasized that claims 5 and 9-11 do not “*present a catalog of structures with no clear interconnection of the structures.*” As can be seen by the highlighted portions below, claims 5 and 9-11 do in fact recite how the various structures are interrelated or interconnected.

a guide block body having load rolling element rolling surfaces that form load rolling element rolling passages *in cooperation with* said rolling element rolling surfaces, said guide block body further having rolling element relief bores *associated with* said load rolling element rolling surfaces; and

end plates provided at both ends of said guide block body in the travel direction of said rail, said end plates each having rolling element direction change passages that form rolling element recirculation passages *in cooperation with* said load rolling element rolling passages and said rolling element relief bores.

In response to these arguments, during the interview, the Examiner asserted that the language “in cooperation with” and “associated with” is not clear because it is broad. In the Examiner Interview Summary, the Examiner asserts that this language is “indefinite in that there is no connection to any structure.” Thus, it appears that the Examiner would like some sort of connection to be recited.

However, it is believed that the language “associated with” and “in cooperation with” is clear and accurately defines the invention. For example, referring to Fig. 5 and the description

thereof, it can be seen that, in accordance with aspects of the present invention, the rolling element rolling grooves 21-1, 21-2, 22-1, 22-2 formed in the rail 11 (which correspond, e.g., to the “rolling element rolling surfaces...of said rail”) are not fastened to or connected to the load rolling element rolling surfaces 32-1, 32-3, 33-1, 33-2 of the guide block 12 (which correspond, e.g., to the “load rolling element rolling surfaces [of the guide block]”). These surfaces are not fastened because they must move relative to each other so that the rail 11 can move or rotate.

Thus, it is believed that language such as “a guide block body having load rolling element rolling surfaces that form load rolling element rolling passages *in cooperation with* said rolling element rolling surfaces” is definite because these surfaces form the “load rolling element rolling passages” in cooperation with each other, and are not interconnected in the sense that they are necessarily connected by some structural connection or fixed to each other.

Furthermore, there is no requirement that the claims must provide “*definition as to how such structures function or perform*” to satisfy §112(2). It is perfectly acceptable to define a structure structurally and not functionally. Finally, as was noted in the previous Response filed on August 27, 2009, definiteness of the claim language must be analyzed, not in a vacuum, but in light of the particular application disclosure.

In summary, although applicants believe that the claim language prior to the current amendment was clear and definite in the manner required by §112, second paragraph, applicants have amended the claims to attempt to define the invention in a manner that the Examiner will find to be clear. However, regarding the Examiner’s assertion that there is no “connection to structure,” it is submitted that such connection can only be recited if it actually exists.

Reconsideration and withdrawal of the rejection under §112, second paragraph, are respectfully requested.

Claim Rejections - 35 U.S.C. §103

Claims 1, 2, 4 and 7 are rejected under 35 U.S.C. §103(a) as being unpatentable over **Liu** (USP 4,694,132, previously cited) in view of **Takei et al.** (USP 5,575,565, previously cited). Claims 3, 6 and 8 are rejected under 35 U.S.C. §103(a) as being unpatentable over **Liu** in view of **Takei et al.** as applied to the claims above, and further in view of **Gilberti** (USP 5,784,932, previously cited).

Initially, it is noted that independent claim 1 was previously rejected under §102 as being anticipated by **Liu**, and claims 2, 4 and 7 were rejected under §103 as being unpatentable over **Liu** in view of **Takei et al.** Independent claim 1 is now rejected over the combination of **Liu** in view of **Takei et al.**

For the reasons set forth below, these rejections are respectfully traversed.

As will be discussed in detail below, it is respectfully submitted that the combination of **Liu** and **Takei et al.** does not disclose or suggest “*wherein each of said plurality of guide blocks includes a U-shaped cross-sectional opening and a portion of said rail is fitted into the U-shaped cross-sectional opening from above the opening, and wherein a top surface of said rail opposite to the portion of said rail fitted into the U-shaped cross-sectional opening and an underside of said rotary table are joined together*” as presently recited in independent claim 1.

In the previous response, it was argued that **Liu** does not disclose or suggest the above-noted features of claim 1. In the current rejection, the Examiner *acknowledges* that **Liu** does not teach all claimed features recited in claim 1, and asserts the following:

Liu teaches the structure substantially as claimed as discussed above including a rail, *the only difference being that the rail does not include an L-shaped cross section and the guide blocks does [sic] not include a U-shaped cross-sectional opening with the rail partially fitted into the opening from above.* However, the patent to Takei et al (at fig. 4) teaches the use of providing a guide rail including an L-shaped cross section partially fitted into a rail from above to be old. See Office Action, page 3, lines 12-18.

However, as will be discussed below, it is respectfully submitted that, contrary to the position taken in the present rejection, **Takei et al.** does not disclose or suggest at least “*wherein each of said plurality of guide blocks includes a U-shaped cross-sectional opening and a portion of said rail is fitted into the U-shaped cross-sectional opening from above the opening,*” as recited in claim 1.

As shown in Figs. 2-4 of **Takei et al.** a rolling guide unit includes a track rail 11 having constant curvature and a slide unit 13 that moves on the track rail 11. As shown in Fig. 4, the track rail 11 is fastened to the bed of, e.g., a machine tool, using bolts 21 (col. 4, lines 24-27). The track rail 11 has a roughly U-shaped cross section (col. 3, lines 37-38).

The slide unit 13 is inserted from above between side walls 11c, 11d of the track rail 11 so that its lower half is between the side walls 11c, 11d of the track rail 11. The slide unit 13 includes a rolling element circulation path 14 in which pluralities of rolling elements 15 circulate. See col. 3, lines 45-56.

However, it is submitted that **Takei et al.** clearly does not disclose or suggest “wherein each of said plurality of guide blocks includes a U-shaped cross-sectional opening and a portion of said rail is fitted into the U-shaped cross-sectional opening from above the opening”.

More specifically, first, unlike the claimed invention, it is the track rail 11 of **Takei et al.** that has the “roughly U-shaped cross section,” and not a plurality of guide blocks. Second, it is the slide unit 13 of **Takei et al.** that is inserted (or fitted) from above between in the U-shaped opening of the track rail 11. Unlike the claimed invention, the slide unit 13 is not a “rail fitted into the U-shaped cross section” as claimed. That is, unlike the slide unit 13, the claimed “rail” is “a ring-shaped integrated rail having no discontinuity in a travel direction thereof”.

Accordingly, **Takei et al.** does not disclose or suggest “*wherein each of said plurality of guide blocks includes a U-shaped cross-sectional opening and a portion of said rail is fitted into the U-shaped cross-sectional opening from above the opening,*” as recited in claim 1, and therefore does not alleviate any of the deficiencies of **Liu**.

Further, it is respectfully submitted that none of the cited references disclose or suggest the feature “*wherein a top surface of said rail opposite to the portion of said rail fitted into the U-shaped cross-sectional opening and an underside of said rotary table are joined together*”. The rejection relies on **Liu** to teach this feature. However, **Liu** teaches “The table top platform may be quickly and easily removed from the turntable 10 by lifting the platform from contact with the spider drive member 20.” See col. 3, lines 59-62.

Thus, **Liu** teaches that a rotary table is in contact with the portion that the Examiner considers corresponds to a rail (i.e., the element 26); however, unlike the claimed invention, **Liu**

does not teach that the rotary table is “joined together” with the element 26, which the Examiner considers to correspond to the claimed rail.

Therefore, neither **Liu** nor **Takei et al.** disclose or suggest the claimed “*wherein a top surface of said rail opposite to the portion of said rail fitted into the U-shaped cross-sectional opening and an underside of said rotary table are joined together*”.

Finally, it is noted that the **Gilberti** reference does not alleviate any of the above-noted deficiencies of **Liu** and **Takei et al.**

A rejection under §103 requires that the combination of teachings applied against the claims must disclose, suggest or render obvious all claimed elements. In view of the discussion above, it is respectfully submitted that the combination of **Liu** and **Takei et al.** does not disclose, suggest or render obvious all claimed elements. Therefore, it is submitted that independent claim 1, and claims dependent therefrom, are not obvious in view of the combination of **Liu** and **Takei et al.** Accordingly, reconsideration and withdrawal of the rejection of claims 1, 2 4 and 7 under §103 are respectfully requested.

Gilberti does not alleviate any of the deficiencies of **Liu** and **Takei et al.** Therefore, claims 3, 6 and 8 patentably distinguish over the combination of **Liu**, **Takei et al.** and **Gilberti** for the same reasons discussed above with respect to claim 1 by virtue of their dependency thereon.

Application No.: 10/586,482
Art Unit: 3637

Amendment under 37 C.F.R. §1.116
Attorney Docket No.: 062661

CONCLUSION

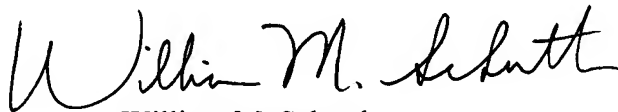
In view of the foregoing, it is submitted that all pending claims are in condition for allowance. A prompt and favorable reconsideration of the rejection and an indication of allowability of all pending claims are earnestly solicited.

If the Examiner believes that there are issues remaining to be resolved in this application, the Examiner is invited to contact the undersigned attorney at the telephone number indicated below to arrange for an interview to expedite and complete prosecution of this case.

If this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. The fees for such an extension or any other fees that may be due with respect to this paper may be charged to Deposit Account No. 50-2866.

Respectfully submitted,

WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP

A handwritten signature in black ink, appearing to read "William M. Schertler". The signature is fluid and cursive, with the first name "William" being the most prominent part.

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